

QUARTERLY SITE INSPECTION REPORT

NOVEMBER 1997

**BAILEY SUPERFUND SITE
ORANGE COUNTY, TEXAS**

January 1998

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Prepared by:



PARSONS ENGINEERING SCIENCE, INC.

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Quarterly Site Inspection Report

November 1997

Bailey Superfund Site

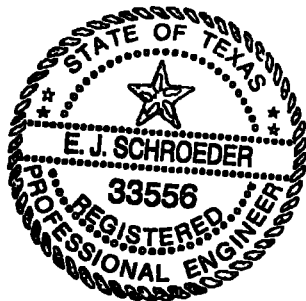
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PARSONS

PARSONS ENGINEERING SCIENCE, INC.

DECEMBER 1997



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SECTION 1

1.0 INTRODUCTION

The first quarterly inspection of the Bailey Site was conducted on November 21, 1997 by Mike Steiner of Parsons ES. Mr. Steiner was the Site Manager during the Final Remediation activities and has a thorough knowledge of the site background and understanding of the implemented remedy. The inspection was conducted in accordance with the Final Inspection, Maintenance, and Monitoring Plan (prepared by Parsons ES and GeoSyntec, September 1997).

An inspection check list was developed to aide in the inspection of the site and is included in Appendix A. The check list was completed as the entire site was walked and observations were made. Any areas of concern that were observed during the inspection were noted and located on a site map which is included in Appendix B. Photographs were taken during the inspection and are presented in Appendix C. Included in the Photographic log are some recent aerial pictures of the site that were taken a few weeks prior to the actual inspection. A summary of the inspection is presented in Section 2.

SECTION 2

2.0 INSPECTION SUMMARY

Mike Steiner of Parsons ES, the Bailey Site Settlers Committee's (BSSC) authorized representative, conducted a visual inspection of the site November 21, 1997.

2.1 Grounds Inspection

The North and East Dike areas were inspected by traversing the surface area of each dike and thoroughly looking for signs of problems that would affect the integrity of the geosynthetic lightweight cap system. Arrangements were made to have the grass cut prior to the inspection. However, recent heavy rains prevented a portion of the site from being mowed. Approximately half of the site was mowed within a few days prior to the inspection. The grass was generally found to be in good condition. There are a few areas where the grass has not fully developed; these locations are noted on the map. The remainder of the site will be mowed when weather conditions allow. Small tire ruts (less than 2 inches in depth) caused by mowing activities were observed on the northwest corner of the East Dike, as located on the site map. These ruts pose no threat to the integrity of the remedial action and do not require action.

The areas of the geosynthetic lightweight cap were inspected for signs of erosion. Only one location was noted of significant erosion. This location was noted as being at the northwest corner of the North Dike, as shown on the map in Appendix B. A small section (less than 2 LF) at the top of the slope, where the soil meets the rip-rap, appeared to have eroded and the geocomposite drainage layer (GDL) was exposed. A small wrinkle (approximately 2 to 3 inches in height) was detected in the GDL. Apparently, the soil on top of the liner had been eroded by surface run-off because the grass had not fully developed at this location. The GDL was not observed to be damaged. No other significant erosion problems were observed for the remainder of the site.

The North and East Dike areas were carefully observed for signs of differential settlement. The site had very heavy rains the day before the inspection and no areas of ponded water were observed that exceeded 2 inches in depth. Some minimal ponding was noted along the edge of the road of the East Dike and was attributed to the recent heavy rains. No evidence, such as distressed vegetation, indicated that this area was not draining properly. One visual observation of possible differential settlement was noted on the North Dike area. This location was on the rip-rap at the western end of the North Dike on the Pond A bank, which is outside of the lightweight geosynthetic composite cap limits. A section of approximately 20 LF in length appears to have a dip of approximately 1 foot or less in the middle of the slope from adjacent areas. This location was noted on the map provided in Appendix B.

The gas vents located on the North and East Dikes were inspected and all found to be in good condition.

2.2 Dike Breaches and Drainage Pipes Inspection

The two breaches in the North Marsh perimeter dike were inspected and found to be in good condition and allowing free flow of tidal waters. The drainage pipes in the former laydown area and at the end of the East Dike were found to be in good condition with no obstructions.

2.3 Fence and Sign Inspection

The length of the fence was walked and observed to be in good condition . The gates and locks were inspected and found to be in good working order. The signs around the perimeter of the site were properly posted and visible.

2.4 Site Access Bridge Inspection

The access bridge to the site was observed to be in good condition. The bridge decking, hand rails, approaches, and steel structure were visually inspected.

2.5 Road Inspection

The access roads on the North and East dikes were inspected for signs of rutting, potholes, erosion, and accumulation of silt. The roads were found to be in good condition.

2.6 Other Observations

Maintenance work was performed at the site in October 1997 and appeared to be working well. This work included erosion repair, sign maintenance, fence maintenance, and grading of the North Marsh Breach slope. The grass that was seeded in the erosion repair areas has not yet taken root as well as had been expected.

The thin grass observed around the site should improve in the spring when the weather is more conducive to growth. The grass will not be dormant in warmer weather.

SECTION 3

3.0 SUMMARY OF PROBLEM AREAS AND RECOMMENDED ACTION

Areas of concern discovered during the November 1997 Quarterly Site Inspection include thin grass cover in some areas, a small section of exposed geocomposite drainage layer on the North Dike, and possible differential settlement outside of the geosynthetic cap limits on the North Dike. The concerns identified during this site inspection do not pose a threat to the remedial action and do not inhibit the proper function of the geosynthetic drainage layer.

- Thin grass cover was observed in a few small areas of the site. This could be due to the late planting of the grass and that it did not fully develop before going dormant for the winter. A recommendation is made to re-seed only those areas of the site where erosion repair and maintenance work has been performed and the grass has not developed. A recommendation regarding the other areas where the grass is thin will be delayed until after the Spring 1998 site inspection. The thin grass may thicken as the weather becomes warmer.
- A small section (approximately 2 feet) of exposed geocomposite drainage layer (GDL) with a small wrinkle was observed on the North Dike. The exposed GDL was covered with top soil and re-seeded immediately following the inspection. Hay bales will be placed in front of this area to slow down the water run-off until vegetation can be established. In the event that the wrinkle in the GDL increases or cannot retain adequate top-soil cover, the following action will be recommended: Remove the top soil and rip-rap within a radius of approximately 4 feet around the area, exposing the GDL and divide and displace the wrinkle in the GDL towards the rip-rap, replace the topsoil and re-seed, as needed.
- Possible differential settlement was observed in a small area of the rip-rap slope located outside of the geosynthetic lightweight cap limits on the North Dike. No signs of differential settlement were observed on the adjacent cap areas. This location was noted on the map included in Appendix B. The recommended action is to continue visual monitoring of this area.

BOOKMARK

APPENDIX A

QUARTERLY SITE INSPECTION CHECK LIST

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BAILEY SITE INSPECTION CHECK LIST

Inspection Date: 11-21-97

Inspection Time: 11:30 a.m.

Name of Inspector: Mike Steiner

Weather Conditions: cloudy, overcast

Ground Inspections

Condition of Vegetation:

Grass Height 2" - 6"

Color yellowish-green

Fullness ok - thin in some areas

Areas of Concern: ☒ Yes No
(If Yes Detail on Map)

Signs of Erosion: ☒ Yes No (If yes detail location on map and note average depth and width)

Exposed Geosynthetics: ☒ Yes No (If yes provide location on map and note if its the geocomposite drainage layer, 60 mil HDPE liner, or geosynthetic clay liner)

Signs of Differential Settlement: ☒ Yes No (If yes, provide location on map noting estimated depth and width)

Ponding Greater than 2" in Depth: Yes ☒ No (If yes, provide location on map noting depth)

Evidence of Prolonged Ponding Yes ☒ No

Estimated date of last rain event: 11-18-97

Gas Vents:

Condition of Barrier: GOOD

Condition of Piping: GOOD

Screens Intact: ☒ Yes No (If no to any, provide details on map)

Riser Pipe Plumb: ☒ Yes No

BAILEY SITE INSPECTION CHECK LIST

Condition of Dike Breaches and Drainage Pipes

Verify that each allows free drainage:

Pond A culvert at South end of East Dike:	<input checked="" type="radio"/> Yes	No
Site Entrance Area (Non-capped Area):	<input checked="" type="radio"/> Yes	No
Perimeter Dike Breach in Pond A:	<input checked="" type="radio"/> Yes	No
Perimeter Dike Breach in North Dike.	<input checked="" type="radio"/> Yes	No

If the answer was No to any of the above, describe the obstruction:

N/A

Fence and Sign Inspection

Chain Link Fencing

Signs of unauthorized entry:	Yes	<input checked="" type="radio"/> No
Fence Damage:	Yes	<input checked="" type="radio"/> No
Corrosion:	Yes	<input checked="" type="radio"/> No
Barb Wire Damage:	Yes	<input checked="" type="radio"/> No

Gates & Locks in good condition: ☒ Yes No

Overhang Extensions

Signs of unauthorized entry:	Yes	<input checked="" type="radio"/> No
Signs of damage:	Yes	<input checked="" type="radio"/> No

Signs

Verified all signs:	<input checked="" type="radio"/> Yes	No
Signs on all gates:	<input checked="" type="radio"/> Yes	No

Provide location of any damage on the map. Describe below any damage to the fence or signs:

N/A

BAILEY SITE INSPECTION CHECK LIST

Site Access Bridge

Are the following in good condition:

Wood Decking	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Hand Rails	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Approaches	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bridge Steel Structure	<input checked="" type="radio"/> Yes	<input type="radio"/> No

If no, describe the observed condition:

N/A

Road Inspection

Rutting	Yes	<input checked="" type="radio"/> No	(If yes to any, provide location on map)
Potholes	Yes	<input checked="" type="radio"/> No	
Erosion Channeling	Yes	<input checked="" type="radio"/> No	
Accumulation of Silt	Yes	<input checked="" type="radio"/> No	

Other General Site Observations:

In October 1997, soil was patched over erosion along the edges of the cap area. This has worked well except that the rye grass has not grown well in some small areas. Doug Wall (ARO) will reseed.

Thin grass observed in a few areas. This should improve in the Spring.

BAILEY SITE INSPECTION CHECK LIST

Summary of Problem Areas Identified

- Thin grass in some small areas
- Should improve in the spring
- Erosion / exposed drainage layer on the North Dike
- Possible rip-rap settlement on the North Dike (outside cap limits)

Mike Steiner/BSP

Inspector's Signature

12-11-97

Date

BOOKMARK

APPENDIX B

SITE MAPS

BOOKMARK

APPENDIX C

PHOTOGRAPHS